CLINICAL NOTES

CLINICAL NOTES ON FRACTURES.

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Nose.—It is important to replace the fragments and make provision for their retention before the end of the first week. A small roll of adhesive plaster applied on each side of the nose and held in place with some pressure by a strip of plaster applied across the rolls from one side to the other may afford all the support that is needed. The application of collodion makes a good dressing in simple fractures, provided it is applied in several layers. If any difficulty is experienced in reducing the fragments by manipulation from without, the reduction may be accomplished by first spraying into the nostril a 4 per cent. solution of cocaine and introducing for a leverage a single blade of a long but strong pair of dressing forceps, rather thin at the end previously protected or padded with a little cotton twisted around the same.

Zygomatic Arch, with Depression.—Matas, of New Orleans, advises the following: The patient being under a general anæsthetic, and all the necessary aseptic precautions having been taken, a long semi-circular Hagedorn needle threaded with silk should be entered one inch above the displaced fragments, passed well into the temporal fossa, and made to come out half an inch below the arch. The silk thread is then utilized in drawing a silver wire around the bone, after which the bone is pulled into place and retained by securing the wire over a firm pad. The wire may be removed in about ten days.

Lower Jaw.—Where the teeth on the opposite sides of the fracture are wired, I have always gotten better results by also wiring both fragments of the lower jaw to the opposing teeth of the upper. It is generally best to trust to the mechanical ingenuity of a dental assistant than to place any dependence upon special appliances to be found in the stock of an instrument dealer.

Clavicle.—In addition to Sayre's dressing, I use a third broad strip of plaster around the elbow and body, with the idea of increasing and maintaining the outward position of the shoulder by correspondingly increasing the power of the lever controlling it.

Humerus (Shaft).—This bone is more liable to non-union than any other long bone. Treves believes that this is due to the interposition of muscular tissue between the fragments, and to the lack of fixation of the shoulder and elbow joints. Hamilton attributes it entirely to the movement induced by leverage of the fore-arm.

The proper plan of treatment is to apply an internal right-angled splint and a long external shoulder-cap; pad both of these well, especially the right-angled splint at that part where the inner condyle is to rest. This splint should reach from the axillary space to the end of the fingers, the fore-arm being fixed at a right angle with the arm. Apply the splint while traction is made on the arm from the elbow, and secure well the arm and fore-arm to the splint by two or three wide strips of adhesive plaster, placing the fore-arm in a position midway between pronation and supination. Fix the shoulder-cap splint, which should extend well down to the elbow, and then secure both in place with a spiral reversed bandage terminating as a spica of the shoulder. Finally, suspend the hand and fore-arm in a triangular sling from the neck.

Elbow-joint.—I regard an anterior angular splint as superior to one that confines the fore-arm in an extended position. By placing the fore-arm in the latter position the humero-ulnar angle can be best kept under control; but when it is thus placed, anterior rotation of the condyloid fragments is inevitable. Then, besides, the probability that there will be some impairment of the joint is increased and, if anchylosis should result, the position of the limb will be most objectionable. Besides these objections to the extended position, there is the fact that the angular position is the most comfortable for the patient.

Fore-arm, Shafts of Both Bones.—The prevention of the encroachments of the fragments and of reparative material on the interosseous space, is a matter of great importance, since the functions of pronation and supination are hindered or may be entirely lost. This may be prevented by using an anterior splint with an elevated ridge along its central portion. Some, however, think the influence exercised by pressure upon the deep muscles of both surfaces of the fore-arm by the means of ordinary splints as being equivalent to, if not better for the purposes of separation than specially fashioned splints. At any rate, the splints employed should be a little wider than the fore-arm, and the fore-arm should be placed at a right angle to the arm, midway between pronation and supination. In this manner lateral pressure of the encircling bandage on the fore-arm is prevented by the splints being a little wider, and the position midway between pronation and supination places the bones fartherest apart. The plaster-of-Paris dressing for a fracture of both bones of the fore-arm is very liable to press upon the sides of the fore-arm, tending to cause the fragments to encroach upon the interosseous space.

Colles'.—In reducing this fracture, I am wedded to Levis' formula, which is: first, make hyperextension, to unlock the fragments and relax the dorsal periosteum; secondly, make longitudinal traction to separate the fragments; and, lastly, make forced flexion to get them into position.